

Form RHA-PNC
(5/80)SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Radioactive Waste Shipment Prior Notification and Manifest Form

See Reverse Side for Instructions

1 Name and Address of Shipper Umetco Minerals Corporation 137 47th Street Niagara Falls, NY 14302		2. Person Responsible for Radioactive Waste Shipment (a) Name G.E. Walck (b) Title Construction Superintendent (c) Telephone No (716) 278-3361	
3. Radioactive Waste Transport Permit No 0211-31-84-X		4 Shipment Identification No.: 1084-112-A	
5. Location from which waste will be shipped Same as (1) above		6 Name and Address of Consignee Chem-Nuclear Systems, Inc. P.O. Box 726 Barnwell, South Carolina 29812	
7. Scheduled Date of Departure of Shipment October 3, 1984		8. Estimated Date of Arrival of Shipment October 5, 1984	
9. Carrier Tri-State Motor Transit	10 Type of Transport Vehicle. Closed Van	11. Trailer No. and Owner (if available)	
12 Routes shipment will follow in State of South Carolina (Be Specific) I-20, I-26, US-321, S.C. 3 and S.C. 64			

Manifest Summary

13 Type Container or Cask Wood Boxes	14 Container Spec CFR 49 173.392 (c)	15 Total No of Containers 9
16 Waste Description, Physical and Chemical Form Contaminated Soil, Metal Oxides, Bldg. Rubble, Wood and Plant Hardware	17. Prominent Radionuclides Uranium (Nat.) .0028 Thorium (Nat.) .004	
18 Total Curies (mCi) .06	19 Transport Group III	20. Total Cubic Feet 585
21 Waste Classification		
<input checked="" type="checkbox"/> Radioactive LSA <input type="checkbox"/> Bulk LSA Normal Form Special Form Fissile <input type="checkbox"/> Radioactive LSA greater than Type A quantities <input type="checkbox"/> Limited quantities and radioactive devices <input type="checkbox"/> Type A quantity <input type="checkbox"/> Type B quantity <input type="checkbox"/> Type B quantity <input type="checkbox"/> Large quantity <input type="checkbox"/> Type A quantity <input type="checkbox"/> Type B quantity <input type="checkbox"/> Large quantity <input type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III		

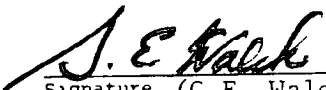
CERTIFICATION

I hereby certify on behalf of the above-named shipper to the South Carolina Department of Health and Environmental Control that the information provided herein is complete and correct to the best of my knowledge, and that the shipper has complied with all the provisions as required by Act No 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act

Date September 25, 1984

G.E. Walck - Construction Supt.

Typed Name and Title of Agent of Shipper


Signature (G.E. Walck)

CONSIGNEE ACKNOWLEDGEMENT

This acknowledges to the South Carolina Department of Health and Environmental Control that the above-described radioactive waste shipment was received

Date of Delivery _____

Signature of Consignee or authorized Agent

Typed or Printed Name and Title

Original: S. Carolina
Copy: Chem-Nuclear
DHEC 802
(5/80)

(Copies of this form may be reproduced locally as needed)

UCCNHT0001857

General Instructions and Information

1. This form is to be used to provide the Department with prior notification of radioactive waste shipments transported into or within the State of South Carolina. This notification is to be made 72 hours before the expected date of arrival in the State. All written notices should be mailed to:
Bureau of Radiological Health
Radioactive Waste Management Section
S.C. Dept. of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201
2. A separate form shall be submitted for each radioactive waste shipment.
3. Prior notification is required of all radioactive waste shipments as defined in paragraph 2 of Interim Regulations for the Transportation of Radioactive Waste into or within South Carolina except as provided in paragraph 4.1.2 of the Regulation.
4. The "Manifest Summary" portion of this form will satisfy requirements of providing the Department with a shipping manifest, however, it does not satisfy the requirements of shipping documents which shall accompany the shipments as required by DOT Regulations and the disposal facility's license and criteria.
5. A copy of this completed form shall be provided to the carrier and all drivers of the radioactive waste shipment.
6. Upon delivery of the shipment to the consignee, acknowledgement of receipt shall be obtained, and a copy of this form and the shipper/carrier's certification form shall be returned to the Department.

Specific Instructions

Item Number

1. Self Explanatory
2. Self Explanatory
3. This item applies to all shipments of radioactive waste transported to and within the State of South Carolina.
4. Each shipment of radioactive waste shall be identified in some manner by the shipper. This number can be a radioactive shipment record number, bill of lading number, allocation number, etc. The identification number shall only be used once to identify the one shipment for which notification is being made.
5. Self Explanatory
6. Indicate in this item the disposal facility, company, organization, etc., to which this shipment has been consigned.
7. Self Explanatory
8. For through shipments, indicate in this item estimated date shipment will pass through the state.
9. Self Explanatory
10. & 11. Applies only to exclusive use, sole use, and full load shipments.
12. All routing information must be specific. You should check with carrier to insure routes you prescribe are appropriate. The carrier is responsible to inform the Department of any changes of routes in South Carolina after departure.
- thru 21. Self Explanatory

Certification: To be signed only by an authorized representative or agent of the shipper and carrier.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Radioactive Waste Shipment Certification Form

General Instructions and Information: This is a two part form to be used by shippers and carriers of radioactive waste. The certifications contained herein satisfy the requirements of Section 13-7-150, of Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act. This certification along with a copy of the prior notification form shall accompany each shipment of radioactive waste into and within the State of South Carolina. The shipper is to complete his portion of the form and present it to the carrier as part of the shipping documents. Upon receipt, the carrier shall complete his portion of the form. Upon delivery of the shipment to the consignee, a copy of this certification form, and a copy of the Prior Notification and Manifest form with the consignee acknowledgement, shall be returned to the Department.

Part I: Shipper's Certificate of Compliance

1. Name of Shipper and Address: Umetco Minerals Corporation 137 - 47th Street Niagara Falls, NY 14302 Telephone No. (716) 278-3361	2. Shipment Identification No. 1084-112-A
	3. Transport Permit No. 0211-31-84-X

In compliance with Act No. 499 of 1980, the South Carolina Radioactive Waste Transportation and Disposal Act, I hereby certify on behalf of the above-named shipper to the South Carolina Department of Health and Environmental Control that the above-named shipper has complied with all provisions of Act No. 499 of 1980, and all applicable laws and administrative rules and regulations, both State and Federal, regarding the packaging, transportation, storage, disposal and delivery of such wastes. I further certify that this shipment of radioactive waste has been inspected within 48 hours of the time of departure and that no items of non-compliance with applicable laws, rules or regulations were found.

Date October 3, 1984G.E. Walck, Construction Superintendent
Typed Name and Title of Agent of Shipper
Signature

Part II: Carrier's Certification

1. Name of Carrier and Address: Tri-State Motor Transit Company P.O. Box 113 Joplin, Missouri 64801 Telephone No. (800) 641-7591	2. Shipment Identification No. 1084-112-A
	3. Transport Trailer No.
4. Scheduled Date of Departure of Shipment: October 3, 1984	5. Estimated Date of Arrival of Shipment: October 5, 1984

Certification is hereby made to the South Carolina Department of Health and Environmental Control that: (a) the shipper has provided the carrier with a copy of the shipment manifest, the certificate of compliance, and the routing instructions; (b) the shipment of radioactive waste has been properly placarded for transport according to applicable U.S. Department of Transportation Regulations; (c) all shipping papers originated or reproduced by the carrier have been properly executed; (d) the transport vehicle has been inspected according to applicable State and Federal regulations within the prescribed intervals and that all safety and operational components are in good working order and meet the requirements of regulations; (e) all drivers who will operate the vehicle within the State of South Carolina are qualified to transport hazardous materials as specified by applicable U.S. Department of Transportation regulations; (f) the Department shall be immediately notified of any variance, occurring after departure, from the shipper's notification of primary routes in South Carolina and estimated date of arrival; (g) all applicable laws and administrative rules and regulations, both State and Federal, regarding the transportation of radioactive wastes will be complied with.

Date October 3, 1984ARTHUR H CASSELMAN DRIVER
Typed or Printed Name and Title
Signature

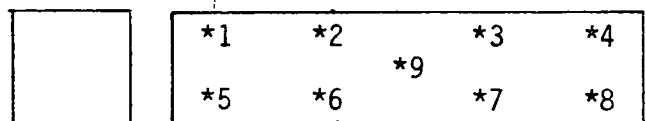
UMETCO MINERALS CORPORATION
NIAGARA FALLS, NEW YORK

DATE 10-3-84

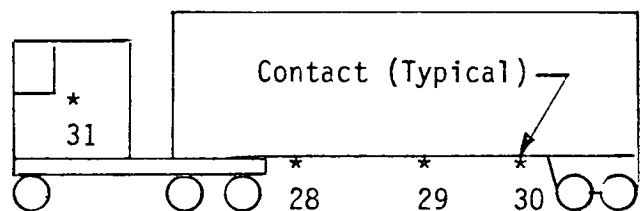
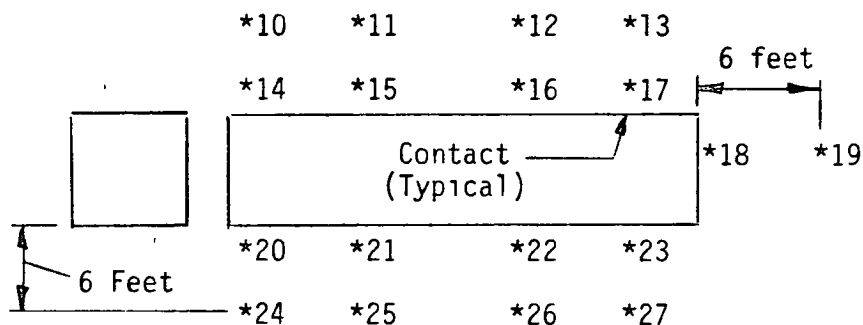
TRACTOR NO. 8778

SHIPMENT NO. 615-3011

TRAILER NO. 440547



TRUCK FLOOR SURVEY (UNLOADED)



TRUCK EXTERIOR SURVEY (LOADED)

NO.	σ	β
1	.006	20
2	.010	—
3	.009	—
4	.007	80
5	.006	40
6	.008	—
7	.008	—
8	.008	70
9	—	50
10	.014	—
11	.016	—
12	.014	—
13	.016	—
14	.020	—
15	.024	—
16	.026	—
17	.024	—
18	.022	—
19	.018	—
20	.018	—
21	.028	—
22	.028	—
23	.034	—
24	.014	—
25	.018	—
26	.024	—
27	.022	—
28	.040	—
29	.036	—
30	.044	—
31	.008	—

LEGEND:

* Location of Reading

σ = mR/hr Ludlum Model 19 (S/N 22534)

β = dpm/100 cm² Ludlum Model 15 (S/N 28886)
w/Ludlum Model 44-9 Probe (S/N 12708) - Eff. 42%

S. E. Walsh
(Survey performed by)

UCCNHT0001860

Umetco Minerals Corporation
Niagara Falls, New York

Date 10 - 2 - 84

CONTAINER SURVEY

BOX CONTROL NO. UM 84 - 180 BOX CAULKED YES
BOX BANDED YES BOX WEIGHT 4881

RADIATION SURVEY (Total)

CONTACT . 042 mR/hr.

3 FEET . 012 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A 29572

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

UCCNHT0001861

Umetco Minerals Corporation
Niagara Falls, New York

Date 10-2-84

CONTAINER SURVEY

BOX CONTROL NO. UM 84-181 BOX CAULKED YES
BOX BANDED YES BOX WEIGHT 4302

RADIATION SURVEY (Total)

CONTACT .030 mR/hr.

3 FEET .012 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A 29573

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

UCCNHT0001862

Umetco Minerals Corporation
Niagara Falls, New York

Date 10-2-84

CONTAINER SURVEY

BOX CONTROL NO. UM 84 - 182 BOX CAULKED YES

BOX BANDED YES BOX WEIGHT 5041

RADIATION SURVEY (Total)

CONTACT .032 mR/hr.

3 FEET .012 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A 29574

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

Umetco Minerals Corporation
Niagara Falls, New York

Date 10-2-84

CONTAINER SURVEY

BOX CONTROL NO. UM 84-183 BOX CAULKED YES

BOX BANDED YES BOX WEIGHT 4434

RADIATION SURVEY (Total)

CONTACT .032 mR/hr.

3 FEET .014 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A-29575

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

Umetco Minerals Corporation
Niagara Falls, New York

Date 10-2-84

CONTAINER SURVEY

BOX CONTROL NO. UM 84-184 BOX CAULKED YES

BOX BANDED YES BOX WEIGHT 5254

RADIATION SURVEY (Total)

CONTACT . 0 50 mR/hr.

3 FEET . 0 20 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A 29576

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

Umetco Minerals Corporation
Niagara Falls, New York

Date 10-2-84

CONTAINER SURVEY

BOX CONTROL NO. UM 84-185 BOX CAULKED YES
BOX BANDED YES BOX WEIGHT 4662

RADIATION SURVEY (Total)

CONTACT .042 mR/hr.

3 FEET .014 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A 29577

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

UCCNHT0001866

Umetco Minerals Corporation
Niagara Falls, New York

Date 10-2-84

CONTAINER SURVEY

BOX CONTROL NO. UM 84-186 BOX CAULKED YES
BOX BANDED YES BOX WEIGHT 4752

RADIATION SURVEY (Total)

CONTACT .026 mR/hr.

3 FEET .012 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A 29578

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

Umetco Minerals Corporation
Niagara Falls, New York

Date 10-2-84

CONTAINER SURVEY

BOX CONTROL NO. UM 84-187 BOX CAULKED YES
BOX BANDED YES BOX WEIGHT 4332

RADIATION SURVEY (Total)

CONTACT .042 mR/hr.

3 FEET .014 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A 29579

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

Umetco Minerals Corporation
Niagara Falls, New York

Date 10-2-84

CONTAINER SURVEY

BOX CONTROL NO. UM 84-188 BOX CAULKED YES

BOX BANDED YES BOX WEIGHT 4840

RADIATION SURVEY (Total)

CONTACT .028 mR/hr.

3 FEET .012 mR/hr.

INSTRUMENT Ludlum Model 19

SERIAL NUMBER 22534

RADIATION SURVEY (Removable)

SMEAR NO. A 29580

0 dpm/100cm² α

BKG dpm/100cm² β

INSTRUMENT NMC Model PC-55

SERIAL NUMBER 81-2712-05

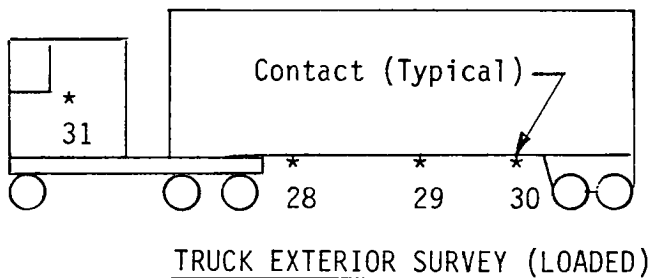
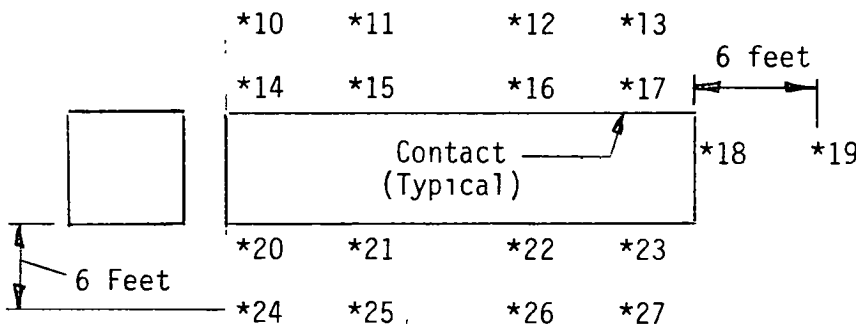
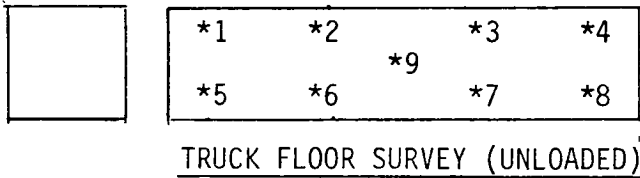
UMETCO MINERALS CORPORATION
NIAGARA FALLS, NEW YORK

DATE 10-3-84

TRACTOR NO. 8778

SHIPMENT NO. 615-3011

TRAILER NO. 440547



NO.	δ	β
1	.006	20
2	.010	—
3	.009	—
4	.007	80
5	.006	40
6	.008	—
7	.008	—
8	.008	70
9	—	50
10	.014	—
11	.016	—
12	.014	—
13	.016	—
14	.020	—
15	.024	—
16	.026	—
17	.024	—
18	.022	—
19	.018	—
20	.018	—
21	.028	—
22	.028	—
23	.034	—
24	.014	—
25	.018	—
26	.024	—
27	.022	—
28	.040	—
29	.036	—
30	.044	—
31	.008	—

LEGEND:

* Location of Reading

δ = mR/hr Ludlum Model 19 (S/N 22534)

β = dpm/100 cm² Ludlum Model 15 (S/N 28886)
w/Ludlum Model 44-9 Probe (S/N 12708) - Eff. 42%

S. E. Walsh
(Survey performed by)

UCCNHT0001870